

Segment Measurement Practice

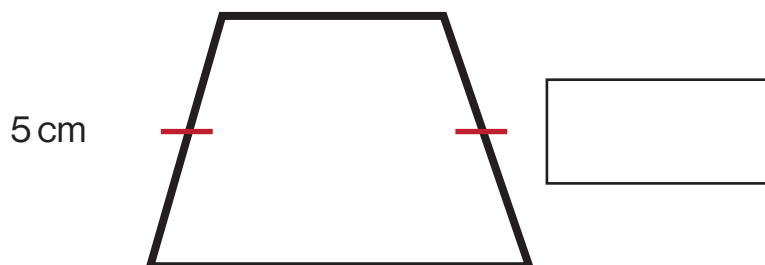
Name: _____

Date: _____

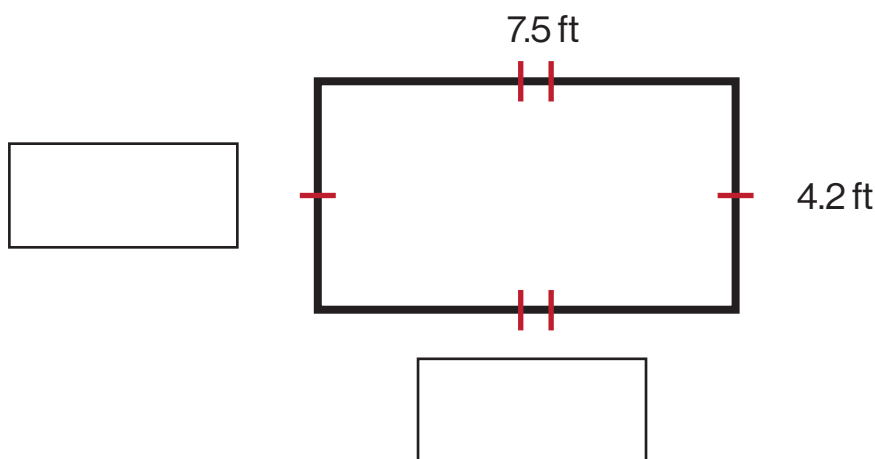
Question 1

Determine the lengths of the unknown segments

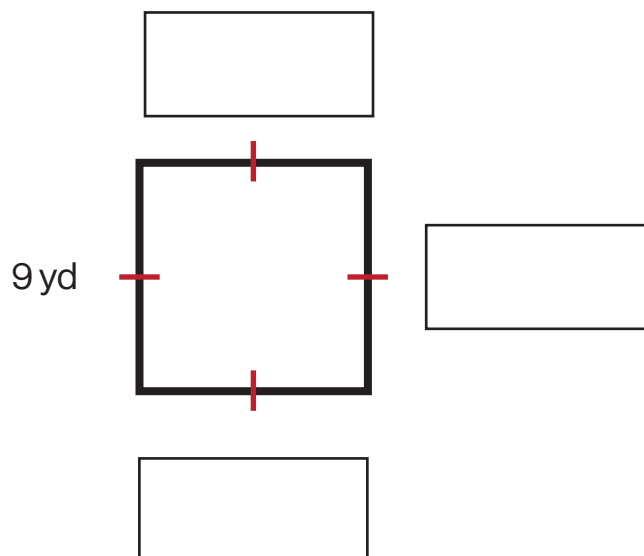
I.



II.



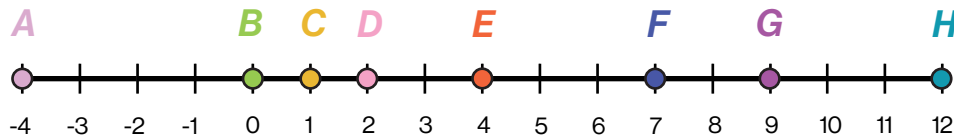
III.



Segment Measurement Practice

Question 2

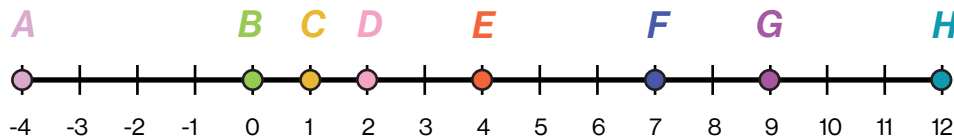
Determine the length of the segment



- I. $\overline{AH}$
- II. $\overline{AB}$
- III. $\overline{BC}$
- IV. $\overline{BG}$
- V. $\overline{CE}$
- VI. $\overline{CF}$
- VII. $\overline{EG}$
- VIII. $\overline{EH}$
- IX. $\overline{FG}$
- X. $\overline{FB}$
- XI. $\overline{GH}$
- XII. $\overline{GC}$
- XIII. $\overline{HB}$
- XIV. $\overline{HD}$

Question 3

Determine the midpoint of the segment



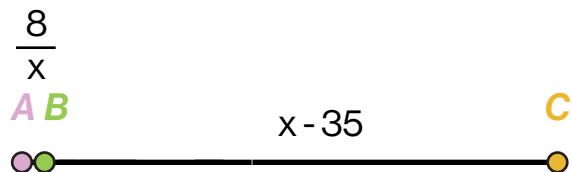
- I. $\overline{AH}$
- II. $\overline{BD}$
- III. $\overline{EG}$
- IV. $\overline{CF}$

Segment Measurement Practice

Question 4

Determine the lengths of the segments

$$AC = 12$$

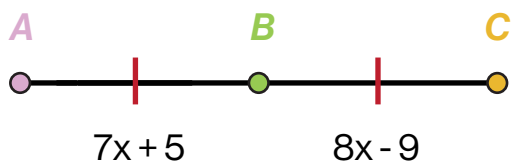


$$AB =$$

$$BC =$$

Question 5

Determine AB



$$AB =$$

Segment Measurement Practice

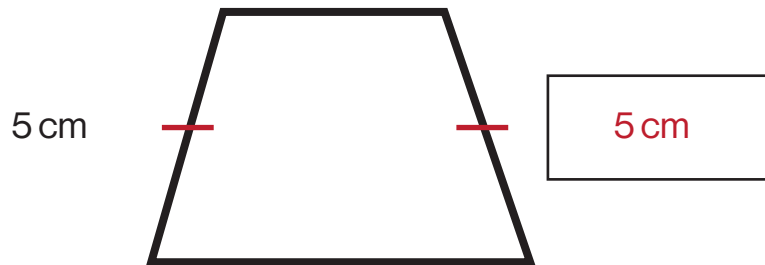
Name: _____ **Key** _____

Date: _____

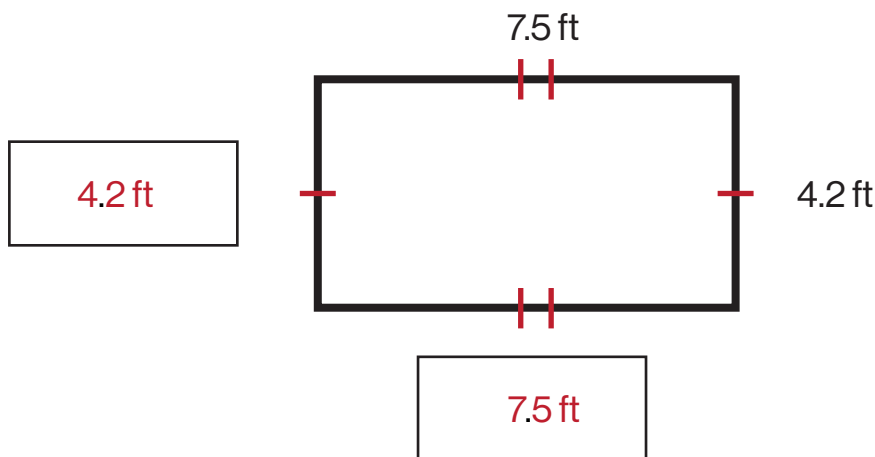
Question 1

Determine the lengths of the unknown segments

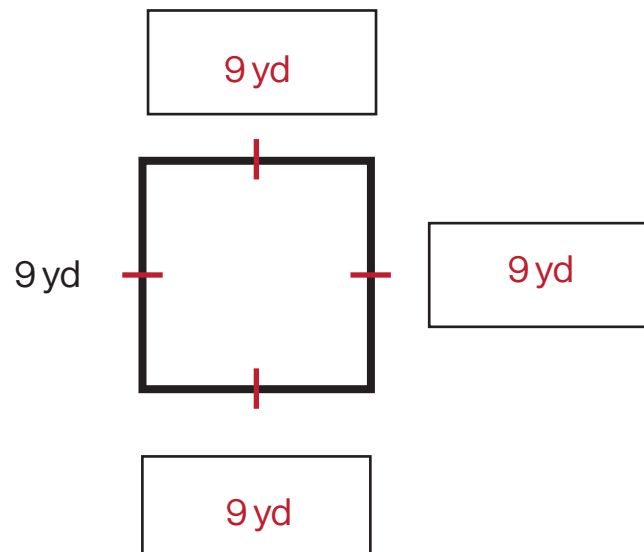
I.



II.



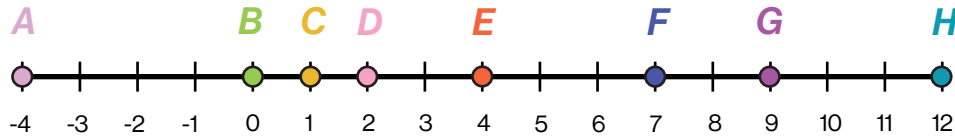
III.



Segment Measurement Practice

Question 2

Determine the length of the segment



I. $\overline{AH}$

$$|12 - (-4)| = 16$$

II. $\overline{AB}$

$$|0 - (-4)| = 4$$

III. $\overline{BC}$

$$|1 - 0| = 1$$

IV. $\overline{BG}$

$$|9 - 0| = 9$$

V. $\overline{CE}$

$$|4 - 1| = 3$$

VI. $\overline{CF}$

$$|7 - 1| = 6$$

VII. $\overline{EG}$

$$|9 - 4| = 5$$

VIII. $\overline{EH}$

$$|12 - 4| = 8$$

IX. $\overline{FG}$

$$|9 - 7| = 2$$

X. $\overline{FB}$

$$|0 - 7| = 7$$

XI. $\overline{GH}$

$$|12 - 9| = 3$$

XII. $\overline{GC}$

$$|1 - 9| = 8$$

XIII. $\overline{HB}$

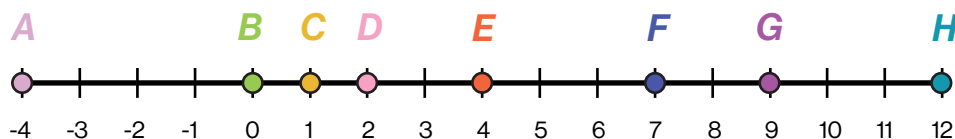
$$|0 - 12| = 12$$

XIV. $\overline{HD}$

$$|2 - 12| = 10$$

Question 3

Determine the midpoint of the segment



I. $\overline{AH}$

$$(-4 + 12) / 2 = 4$$

II. $\overline{BD}$

$$(0 + 2) / 2 = 1$$

III. $\overline{EG}$

$$(4 + 9) / 2 = 6.5$$

IV. $\overline{CF}$

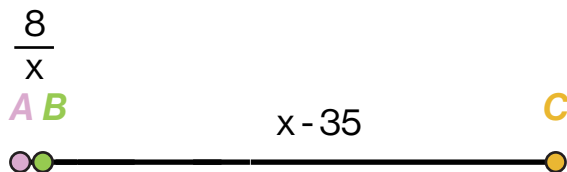
$$(1 + 7) / 2 = 4$$

Segment Measurement Practice

Question 4

Determine the lengths of the segments

$$AC = 12$$



$$AB = 8 / 46.829 = 0.171 \text{ OR } 8 / 0.171 = 46.784$$

$$BC = 46.829 - 35 = 11.829 \text{ OR } 0.171 - 35 = -34.829 \text{ Distance Cannot Be Negative}$$

$$\left(\frac{8}{x}\right) + (x - 35) = 12$$

$$\frac{8 + x^2 - 35x}{x} = 12$$

$$8 + x^2 - 35x = 12x$$

$$8 + x^2 - 47x = 0$$

$$x^2 - 47x + 8 = 0$$

$$\begin{matrix} a & b & c \end{matrix}$$

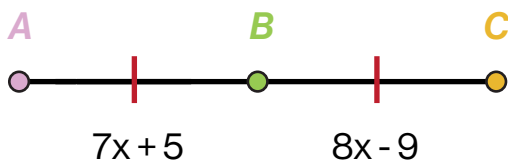
$$\frac{-b \pm \sqrt{b^2 - 4(ac)}}{2a}$$

$$\frac{-(-47) + \sqrt{(-47)^2 - 4(1 \cdot 8)}}{2(1)} = 46.829 \quad \checkmark$$

$$\frac{-(-47) - \sqrt{(-47)^2 - 4(1 \cdot 8)}}{2(1)} = 0.171 \quad \times$$

Question 5

Determine AB



$$AB = 103$$

$$7x + 5 = 8x - 9$$

$$AB: 7(14) + 5 = 103$$

$$7x + 5 - 8x = -9$$

$$-x + 5 = -9$$

$$-x = -9 - 5$$

$$-x = -14$$

$$x = 14$$